

## **REMARKS**

Applicant is in receipt of the Office Action mailed June 28, 2005. Claims 44-97 have been cancelled. New claims 98-151 have been added based on the allowed subject matter. Thus, claims 98-151 are pending in the case. Reconsideration of the present case is earnestly requested in light of the following remarks.

### **Claim Objections**

Claims 53-55, 81, and 94 were objected to due to the asserted informality that after “at least to a degree” there should be a “to” added. While these claims have been cancelled, some of the new claims also include this language. Applicant respectfully disagrees with the Examiner’s reasoning. For example, omitting the descriptive phrase “at least to a degree”, the claim clause reads thusly: “searching for regions of the target image having a color characterization that matches the color characterization of the template image”, which is grammatically correct. The inclusion of the descriptive phrase does not change this grammar. Thus, Applicant respectfully submits that the objection is improper.

### **Priority**

The Examiner asserts that the limitations “determining a step size”, “determining one or more dominant color categories”, and “searching a proximal region proximal to the color match candidate area” do not have proper support in the priority application 09/375,453 to Lin et al (U.S. Pat. 6,757,428, “Lin”).

Applicant respectfully submits that the limitation “determining a step size” has support in Lin per the following:

“These sample pixels may be generated by any of various sampling techniques, such as **grid-based sampling**, random sampling, or other non-uniform sampling.” (*emphasis added*)

Applicant respectfully submits that determining a step size is inherent in grid-based sampling, i.e., the step size must be determined to set the grid resolution.

Applicant respectfully submits that the limitation “determining one or more dominant color categories” has support in Lin per the following:

“The Hue, Saturation, Intensity (HSI) or Hue, Saturation, Luminance (HSL) color space was developed to put color in terms that are easier for humans to quantify. The hue component is color as we normally think; such as orange, green, violet, and so on (a rainbow is a way of visualizing the range of hues). Thus, **hue represents the dominant color** as perceived by an observer.” *(emphasis added)*

“In the HSI color space, since the color and intensity information can be separated, one usually thresholds the color image in the hue plane **to identify the dominant color (hue).**” *(emphasis added)*

and

“For each image object pixel, the method determines a **color category** for the respective pixel based on values of the respective pixel, i.e., hue, saturation and intensity values, wherein the color category is one a plurality of possible color categories or bins (or sub-spaces) in the HSI space. **The number of pixels assigned to each category is then counted and normalized by the total number of pixels in the selected region of interest (or entire image), i.e., the percentage of pixels in each color category characterizes the colors of the image or ROI.** The percentage of pixels in each color category may also be used as a quantitative measurement of the color distribution of the image.

In one embodiment, **the method first divides the double cone HSI color into sub-spaces so that each subspace represents a color category.** All the categories together include every possible color, including black and white....the method determines a color category for the respective pixel based on hue and saturation values of the respective pixel. Thus the method operates to determine a color category for the respective pixel based on hue, saturation and intensity values of the respective pixel.

**As the pixels are analyzed and assigned to color categories, the method stores information in the computer regarding the number of pixels in each of the color categories. The method may then compute a percentage of the pixels in each of the color categories, wherein this percentage information characterizes colors in the image object.**” *(emphasis added)*

Applicant submits that Lin clearly supports color categories based on hue, and determining a dominant color (hue) for the image. Applicant notes that the “color categories” comprise a color map or spectrum at a specified resolution, since the color categories together cover all colors, and that in this system determining a dominant color (e.g., based on hue) means determining a dominant color category. Thus, Applicant respectfully submits that this feature has proper support in Lin.

Moreover, Applicant notes that per the priority dates of the art cited for these claims: Krum: 18 Jun. 1999; Park: 30 Dec. 1999; Nelson: 24 Aug. 1998; Hsu: 1 Aug. 1997; Kato: 20 Dec. 1999; and Chen: 26 Jan. 1999, only Park and Kato have filing dates that fall between the filing date of the present application (14 Aug. 2000) and that of the parent application (17 Aug. 1999), and so the above priority/support issue is only germane to the subject matter of (now cancelled) claims 55, 72, and 74-76. Applicant notes that the feature “determining a step size” (of cancelled claim 55, and new claims ) has been shown above to have support in the parent application. As for the subject matter of (now cancelled) claims 74-76, Applicant will consider the cited art on its merits.

### **Allowed Subject Matter**

Applicant appreciates the allowed subject matter of claims 59-61, and 83. As indicated above, Applicant has cancelled the previous claims, and added new claims based on the allowed subject matter. Thus, Applicant believes the claims as currently written are patentably distinct and non-obvious over the cited art, and are thus allowable.

### **Section 102 Rejections**

Claims 44-50, 53, 54, 77-81, 88-91, 94, and 95 were rejected under 35 U.S.C. 102(e) as being anticipated by Hotta (US 6,898,318, “Hotta”).

Claims 44, 51-54, 56-58, 66, 67, 80-82, 86-88, and 92-97 were rejected under 35 U.S.C. 102(e) as being anticipated by Krumm et al (US 6,532,301, “Krumm ‘301”).

Applicant respectfully submits that because these claims have been cancelled, the section 102 rejection of these claims is moot. Moreover, Applicant submits that the new claims presented above are based on the allowed subject matter, and thus Applicant

respectfully submits that the claims as currently written are patentably distinct and non-obvious over the cited art, and are thus allowable.

### **Section 103 Rejections**

Claim 55 was rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm (US 6,611,622, “Krumm ‘622”) in view of Park et al (U.S. Patent No. 6,584,212, “Park”).

Claim 62 was rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm (US 6,532,301, “Krumm ‘301”).

Claims 64-65 were rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm ‘622 in view of Nelson et al (U.S. Patent No. 6,243,713, “Nelson”).

Claims 67-70 were rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm ‘622 in view of Hsu et al (U.S. Patent No. 6,078,701, “Hsu”).

Claim 71 was rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm ‘622 in view of Hsu, and further in view of Nelson.

Claim 72 was rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm ‘622 in view of Hsu, and further in view of Kato et al. (U.S. 6,665,446, “Kato”).

Claim 73 was rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm ‘622 in view of Hsu, and further in view of Chen et al. (1449, Item B7, “Chen”).

Claims 74-76 were rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm ‘622 in view of Hsu, and further in view of Park.

Claim 85 was rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm ‘301, in view of Chen.

Claims 63 and 84 were rejected under 35 U.S.C. 103(a) as being unpatentable over Krumm ‘301, in view of Nelson.

Applicant respectfully submits that because these claims have been cancelled, the section 103 rejection of these claims is moot. Moreover, Applicant submits that the new claims presented above are based on the allowed subject matter, and thus Applicant respectfully submits that the claims as currently written are patentably distinct and non-obvious over the cited art, and are thus allowable.

## CONCLUSION

Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5150-45500/JCH.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☒ Information Disclosure Statement
- ☐ Check in the amount of \$            for fees (            ).
- ☐ Other:

Respectfully submitted,



\_\_\_\_\_  
Jeffrey C. Hood  
Reg. No. 35,198  
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert & Goetzel PC  
P.O. Box 398  
Austin, TX 78767-0398  
Phone: (512) 853-8800  
Date: 8/16/2005 JCH/MSW